# Can You Stand \*t?

How standing all day affects your body & what you can do to help.





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## ASTANDING PROBLEM & SOLUTION

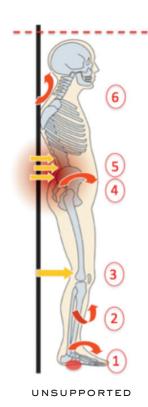
Do you have a job that requires continuous standing? Then, you know this all too well: When your feet suffer, so can the rest of you—whether it's your knees, your back, or your mood—not to mention your productivity. But you can take action—from finding the right footwear to making the right moves. We've consulted some of the world's leading experts on biomechanics to bring you tips and tricks to make standing all day a breeze.

## THE BIOMECHANICS OF **STANDING**

From nurses and store clerks to hair stylists and assembly line workers, many people have jobs that require standing all day. In fact, nearly half of all workers in the world spend three-fourths of their day standing at work.

Do you earn your living on your feet, standing for hours on end? If so, your body has probably registered a complaint or two! Standing on flat ground in unsupportive shoes causes changes in your posture—and a ripple effect from your feet all the way up through your body.





#### A NEGATIVE STANCE

Starting with your feet, here's the ripple effect standing can cause:

- 1. Pronation, where your feet roll inward too much
- 2. Internal rotation of your lower legs
- 3. Flexing of your knees
- 4. Forward tilting of your hips
- 5. Increased low-back joint compression
- 6. Increased curvature of your spine

Being on your feet all day clearly wreaks havoc on your joints and muscles. But, unfortunately, that's not all.

#### ADDITIONAL HEALTH ISSUES

Whether sitting or standing, being still throughout the day can increase your risk of certain conditions and diseases. Prolonged standing can cause symptoms and longer-term problems like these:

- Sore feet, as well as bunions, corns, and heel problems
- Poor circulation in legs and feet, leading to muscle fatigue, pain, and swelling. Pooling blood in your legs can eventually cause varicose veins.
- Low back pain, and neck and shoulder discomfort
- Temporary immobility of joints in the feet, knees, hips, and spine, which can lead to tendon and ligament damage
- Knee and hip arthritis
- Other health problems, such as preterm birth and cardiovascular risks

#### Sources

- WebMD: Standing All Day at Work May Take Toll on Health
- Vionic Healthy Footnotes: The Biomechanics of Standing
- NEA Member Benefits: Take the Ache Out of Standing All Day
- Rehabilitation Nursing: Evidence of Health Risks Associated with Prolonged Standing at Work and Intervention Effectiveness
- Canadian Centre for Occupational Health and Safety: Working in a Standing Position—Basic Information
- Hazards Magazine: Standing Problem



Clearly, having a job where you stand all day comes with a few liabilities. But there's quite a lot you can do to reduce symptoms and prevent long-term problems from using good posture to changing positions often throughout the day.

#### **CHECK YOUR POSTURE**

As you're standing, imagine a line running straight down from your ears through your hips to your feet. Visualize your head as a balloon floating upward, and feel most of your weight in your heels. Try not to jut your hips forward.

#### CHANGE POSITIONS OFTEN

Small changes add up. First, changing positions increases the number of muscles you use, which helps distribute the load more equally throughout your body. That, in turn, puts less strain on the individual joints and muscles you use to stay in an upright position. Second, changing positions can improve circulation to your muscles. Better circulation and an "equal-opportunity workload" can reduce your overall fatigue.

#### CHANGE IT UP THROUGHOUT THE DAY

- Take regular breaks, and sit or walk.
   When muscles feel tired, relax. When muscles feel stiff, move around.
- At the very least, try not to stand still for too long. Have trouble remembering to move? If you can, set a phone alarm to remind you to move at least every 30 minutes or so.
- To counteract the effects of over pronation, roll your feet outwards and try standing on the outside of your feet once in a while.
- Another way to vary your standing position is to try the third-position ballet stance: Shift one foot so its heel is touching the arch of your other foot at a right angle. This externally rotates your body and also helps to relieve the effects of over pronation.
- Do what you can to avoid extreme bending, stretching, and twisting.
- If you can, alternate between sitting and standing.

#### WHAT ELSE CAN YOU DO?

Here are some other things that can help reduce discomfort while standing:

- Organize your work so what you do most often is within easy reach. Avoid overreaching. Make sure your workstation is at the right height.
- Always face and keep your body close to your work.
- If possible, use a portable footrest to shift your body weight from both legs to one leg or the other.

#### Sources.

- NEA Member Benefits: Take the Ache Out of Standing All Day
- Canadian Centre for Occupational Health and Safety: Working in a Standing Position—Basic Information
- Vionic Healthy Footnotes: The Biomechanics of Standing
- WebMD: Standing All Day at Work May Take Toll on Health

## **Exercises**

### for People Who Stand at Work

If standing all day makes you fatigued and sore, exercising may be the last thing you feel like doing. But just remember: These exercises will improve your circulation, leaving you feeling so much better. Try to create a regular routine: Do them on your break or before or after your workday.

#### ONE-LEGGED PICK-UP

- 1. Place a small object in front of you on the floor.
- 2. Lift one foot off the floor and bend over to pick up the object.
- 3. Straighten back up, using a slow, controlled movement. Don't let the suspended foot touch the floor.
- 4. Bend over again to place the object back on the floor without touching your foot on the floor.
- 5. Straighten back up without touching your foot on the floor. Repeat 10-12 times or until your supporting leg becomes fatigued, and switch legs.

#### **BACKWARD LUNGE**

- 1. Stand tall with hands on hips.
- 2. Take a long step backward landing on the ball of your foot.
- 3. Bend your knee, keeping your back straight while looking straight ahead. Do not let your knee extend over your toes.
- 4. Return to standing position. Repeat up to 10 times, and switch legs.

#### SINGLE-LEG STANDING CALF RAISE

- 1. Stand tall near a wall, desk, or countertop for support, if you need it.
- 2. Cross one foot behind the other ankle.
- 3. Rise up on your toes as high as you can in a slow and controlled motion.
- 4. Pause for 2 seconds and slowly return to the starting position. Repeat 12-15 times, and switch legs.

#### **SQUATS**

- 1. Stand with your feet shoulder-width apart and look straight ahead.
- 2. Slowly lower into a squat as if you are going to sit in a chair.
- 3. Hold for 2 seconds and slowly come back to standing. Be sure to push through your heels, and don't lean forward or let your knees extend past your toes. Repeat 10 to 15 times.

#### Source

NurseTogether: 5 Best Leg Exercises for Nurses

## Stretches

### To Do Throughout the Day

Whenever you get the chance during the day, try one or two of the following stretches. It only takes a few minutes. Stretching your joints and muscles helps ease tension and fatigue—it's worth the effort!

#### **HEAD-AND-NECK STRETCHES**

Hold each stretch for 5 seconds before returning to neutral position.

- 1. Stretch your neck forward by pressing your chin to your chest.
- 2. Turn your head to one side as far as you comfortably can, looking over your shoulder, and then slowly turn your head to the other side.
- 3. Tilt your head toward your shoulder as far as you comfortably can, without raising your shoulder. Repeat on the other side.

#### SHOULDER STRETCHES

- 1. Shrug your shoulders up toward your ears. Hold for a few seconds. Let your shoulders drop back into a neutral position. Repeat several times.
- 2. Circle one shoulder backward 3 times, then forward 3 times. Repeat with the other shoulder. Then circle both shoulders back at the same time 3-5 times and forward 3-5 times.
- 3. Place your hand on a doorjamb or other solid vertical space with your arm fully extended. Lean forward until you feel a stretch in your shoulder. Hold for a few seconds. Repeat on the other side.

#### LOWER-BACK STRETCH

Place one foot slightly in front of the other. Point the toes of your front foot toward the ceiling, and then bend the opposite leg while bending slightly forward at the waist. Place your hands on the sides of your legs for balance and hold for a few seconds, stretching your lower back. Repeat with the other foot in front.

#### LEG STRETCHES

- 1. Stand close to a wall and place your hands on the wall at about shoulder height. Place the toe of your left foot against the wall and lean forward, stretching the calf muscle of your right leg for several seconds. Repeat on the other side.
- 2. Stand close to a wall, desk, or other solid surface. Grab the ankle of your left leg with your left hand and squeeze the leg toward your buttocks. Hold for a few seconds, stretching the quadriceps muscle. Repeat on the other side.

#### **FOOT STRETCHES**

Hold onto a desk or chair, if needed, for these exercises.

- 1. Lift your left leg and point and flex your left foot 4-5 times. Repeat with your right foot.
- 2. Raise your left foot and move it in a circular direction, first one way and then the other 4-5 times. Repeat with your right foot.

#### Source.

- AZ Central: Health Exercises for Standing All Day
- NEA Member Benefits: Take the Ache Out of Standing All Day

## THE BEST SHOES FOR STANDING

You may be the one working, but your feet bear the brunt of your weight while standing. Wearing shoes that support your feet and fit well can go a long way toward minimizing any pain and fatigue—not only for your feet, but for the rest of your body, too. That's why selecting the right footwear is so important.

#### WHAT TO LOOK FOR IN A SHOE:

- · A deep heel cup and firm grip for your heels
- Room for your toes to move
- Arch support
- A firm, yet flexible, midsole
- Cushioning for your feet with a shock-absorbing insole
- High-quality leathers that follow the natural contours of your feet
- Heels lower than 5 cm (2 inches)

#### THE VIONIC® ADVANTAGE:



#### NATURAL ALIGNMENT

Vionic footwear is designed to promote natural alignment from the ground up with a deep heel cup that provides essential stability, a firm yet flexible midsole for perfect balance and a podiatrist-designed footbed for addictive support.





### VIONIC°

FIRST & ONLY

SANDAL BRAND PROVEN TO EFFECTIVELY

**ALLEVIATE HEEL PAIN** 

#### TRIED & TESTED TECHNOLOGY

Vionic brand's supportive technology is based on more than 30 years of podiatric medical success and innovative collaboration from renowned experts in biomechanics and foot health. In addition, our contoured sandals are proven to effectively alleviate heel pain\*, giving you the confidence to walk, move and live free from pain.

VionicShoes.com

